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These Things We Do,

Personnel Recovery in the Conflicts of Southeast Asia, 1964-1976

by

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Abstract

The purpose of this research is to identify USAF personnel recovery strategic and operational lessons during the American operations in Southeast Asia, from 1964 until 1976. First, the study shows how the United States was initially ill-prepared to conduct search and rescue in this operation. It took the USAF several years to develop aircraft, equipment, training and tactics to become successful in Southeast Asia. The importance of maintaining highly trained and equipped assets, dedicated to performing search and rescue is highlighted. Additionally, the study shows the multitude of missions that the USAF personnel recovery squadrons were capable of performing in these conflicts. Finally, the study compares the actions of Southeast Asia to current operations and gives recommendations for future personnel recovery employment and organization.

It is my duty, as a member of the Air Rescue Service, to save life and to aid the injured.
I will be prepared at all times to perform my assigned duties quickly and efficiently,
placing these duties before personal desires and comforts.
These things I do that others may live.[1]

When the US military entered the conflict in Southeast Asia, it was unprepared for the high losses inflicted on both to men and equipment by a robust insurgent force. Because the military antic pated a low-intensity counterinsurgency, military adviser similarly projected low losses. As causalities and prisoners-of-war increased, it was clear that the initial plans for the conflict could not and did not adequately protect the servicemen and civilians involved. The US Air Force recognized the importance of saving the lives of military members during combat and employed units designed especially for the purpose of personnel recovery. Personnel recovery is the "sum of military, diplomatic, and civil efforts to affect the recovery and reintegration of isolated personnel"; it consists of missions such as combat search and rescue, search and rescue and hostage recovery.[2] Initially, there was little effort dedicated in establishing specific support to personnel recovery. The Air Rescue Service (ARS) eventually deployed aircraft and airmen who performed personnel recovery as well as casualty evacuation, humanitarian aid and non-combatant evacuation. Overtime, the airmen became successful in rescue and recovery, not because of better training or equipment, but through their sheer determination and ingenuity. The loss of personnel and aircraft highlighted the need for dedicated personnel recovery in irregular warfare and that the Air Force must continue to advance this core function to ensure future operations are vulnerable to the same losses.

Rescue Buildup in Southeast Asia, 1964-1969

The first Air Force causalities in Southeast Asia occurred when a C-47B was shot down over Laos while performing an intelligence gathering mission, on 23 March 1961.[3] The Air Force failed to recognize the threat that the Viet Cong and North Vietnamese imposed and

exposure the Airmen advisors and intelligence gatherers were facing. As more and more men and aircraft were assigned to support operations such as Jungle Jim, Farm Gate, Ranch Hand and Mule Train, the Air Force could not rely on the CIA's Air America, on the US Army or the South Vietnamese Air Force for rescue and recovery. The first Ranch Hand C-123 crashed on February 2, 1962; nine days later by the first Farm Gate SC-47 crashing, both in South Vietnam.[4] More air losses followed. The commander of the ARS, Brigadier General Adriel N. Williams acknowledged the lack of support and argued to the commanders of the Pacific Air Force (PACAF) and the Military Air Transport Service (MATS) that:

> USAF combat aircrews are made dependent upon ill-equipped and ill-trained (for the task) U.S. Army and Marine Corps helicopter resources diverted to accomplish our mission. Their noble efforts have wrought confusion and even disaster when engaged in some attempts to prosecute Air Rescue Service missions . . . Had professional USAF Air Rescue Service been available; the techniques employed would have automatically averted collision and disaster.[5]

PACAF was in the process to partially rectify the problem, when it established Detachment 3 of the Pacific Air Rescue Center (PARC), to support rescue operations in Indochina, on 1 April 1963. The mission of Detachment 3 was to set up the Search and Rescue Coordination Center (SARCC), in Tan Son Khut Air Base, Saigon; later, this unit was renamed the Joint Search and Rescue Center (JSARC). This element acted as a command and control element for search and rescue operation within Southeast Asia.[6] JSARC's mission as the coordinating agency was to ensure proper rescue efforts were provided all Americans and coalition members in the theater. As no Air Force assets had been dedicated to rescue early in the conflict, the JSARC relied heavily CIA, US Army, Marines and Vietnamese Army support. Initially, the Air Force's contribution to combat rescue was minimal; a greater effort was required to adequately support the Air Force, as well as all other Americans in Indochina.

It was clear to those Airmen fighting in Indochina that there was a definite need for a dedicated rescue effort. 1962 saw a total of nine Air Force aircraft lost; in 1963 another 16 aircraft were downed in combat, still with no dedicated rescue aircraft to support them.[7] In 1962, Major E.J. Trexler, the Detachment 3 Commander, recommended that the Air Force deploy men and aircraft for rescue support in the theater.[8] His recommendations were overlooked. The continued losses of American aircraft lead Major Alan Saunders, next commander of Detachment 3, to prepare a study for "justification of professional SAR forces in Vietnam, in 1963."[9] "The need for professional SAR forces in this area has been recognized for a long time and has been made a matter of record to 2AD [Air Division] and Pacific Air Rescue (PAR) Headquarters, on many occasions in the past," wrote Lieutenant Colonel Fowler, the Deputy Director of the Air Operations Center.[10] The SARCC report showed the increase in US causalities, the increasing sortie rates, the adverse operating conditions and the lack of personnel trained in rescue and recovery clearly required a dedicated rescue force. While the commander of PACAF agreed that rescue was needed Southeast Asia, the commander of Military Assistance Command-Vietnam (MAC-V) and Pacific Command (PACOM) did not want additional aircraft in country.

There were several reasons that Air Force rescue forces were kept from Indochina. First, the actions in Vietnam, Cambodia and Laos were somewhat covert in nature and MAC-V did not want additional forces in the theater. The second reason was an Army-Air Force battle. As Major Anderson tried to coordinate with MAC-V to request dedicated rescue assets, he was blocked by the Army staff. The Army felt that additional rescue forces were not required because rescue could be done by Army helicopters and not Air Force helicopters.[11] Even though the Army did not specifically train for rescue operations, they felt it could be done as a secondary

mission. The final reason was that the South Vietnamese Air Force was initially charged to support search and rescue and perform medical evacuation within their country. The South Vietnamese were not equipped, trained or prepared to perform either of these missions. As more and more rescue mission resulted in failure MAC-V or PACOM could not ignore the fact that rescue was needed. The commanders of PACAF, MAC-V and the Chief of Staff of the USAF agreed to allow the ARS to deploy to Southeast Asia, and in March 1964, they agreed to transfer rescue assets to support operations. [12] After two years of activity, Southeast Asia finally saw the combat rescue and recovery assets that it had required since the beginning of the conflict.

At this time, all USAF rescue aircraft and personnel were organized by the Air Rescue Service (ARS). The ARS had a storied history from successful operation in Korea. From 1950 to 1953 the ARS recovered 340 American aviators, of those 254 were behind enemy lines.[13] The ARS was a subset of the MATS, which acted as the lead command for all of rescue. Under the command of MATS the capabilities of the ARS were allowed to decline severely after the Korea Conflict. The Air Force looked to spread the ARS across the globe to be ready to perform peacetime rescue and humanitarian operations.[14] The importance of combat rescue in the Korean Conflict was lost to Air Force. The squadrons of the ARS were spread around the world and specialized for the airbase where they functioned; no two squadrons were alike.[15] In 1958 the Air Force removed the wartime mission from the ARS when it released a reorganization directive that stated:

> ARS will be organized, manned, equipped, trained, and deployed to support peacetime air operations. No special units or specially designed aircraft will be provided for the sole purpose of wartime search and rescue.[16]

By 1961, there were only ten rescue squadrons, divided into detachment, providing local base rescue for almost all major airbases. [17] During this period, the booming US space program

acquired more of the ARS's attention. The 1960's saw Air Force rescue focus more and more on water rescue missions.[18] When American advisors entered Indochina, the rescue service was unprepared to assist them in combat rescue and recovery. The first USAF rescue crews to reach Southeast Asia learned, on the job, to perform combat rescue.

It was June 20, 1964 when first two USAF Kaman HH-43B Huskies arrived at Nakhon Phanom, Thailand, with 36 personnel, in order to fill the rescue gap. Because MAC-V did not want to increase personnel numbers and wanted to maintain the covert nature of operations, Thailand, a neutral nation, became the center for the rescue buildup. By this time there were already 143 fatalities from US aircraft crashes in Indochina.[19] These aircraft had been ordered to the theater by the Commander of PACAF and Joint Chiefs. Initially, the commander of the ARS wanted the more advanced Sikorsky CH-3 helicopter to be its primary rescue aircraft. The CH-3s that the Air Force acquired could not be quickly modified for combat, so the HH-43 was deployed in its place.[20] The HH-43B was designed for non-combat rescue and firefighting and was not truly a combat worthy aircraft, but the Air Force expected it to initially fulfill a combat role. The Huskie did set itself apart from Army and Marine helicopters with the addition of the 200 foot hoist that allowed the crews to penetrate the forest canopy to help with rescue.[21] The two HH-43's provided a small capability for theater personnel recovery support, but more Air Force assets were needed to provide adequate coverage. By the end of 1964, the USAF had established four detachments, at Bien Hoa and Da Nang in South Vietnam and Takhli and Nakhon Phanom in Thailand, performing search and rescue, and local base recovery missions.[22] These aircraft provided the minimal rescue and recovery force necessary to support air operations. When the USAF increased its presence in Southeast Asia reality struck that

improvements were clearly required, this was highlighted by the use of a non-combat aircraft to perform the necessary mission of combat rescue.

The dense jungles of Indochina required a rotary-wing force to perform search and rescue. Though slower to reach the survivors, the helicopter proved too versatile not to be selected as the Air Force's primary rescue platform. Pilots were bailing out either in the jungle or over the Gulf of Tonkin; the helicopter was the correct tool to recover them. Realizing that more advanced helicopters were needed, the ARS contracted Kaman to improve the HH-43. The result was the F model, which was an upgraded Huskie which was better equipped for combat operations. The HH-43F began to arrive in country in November 1964. By November 1964, the numbers of HH-43s had increased to thirteen, of both models, and the helicopters were operating from six bases in Thailand and Vietnam.[23]

While not the preferred combat rescue helicopter, the HH-43's in 1964 and 1965 made a name for themselves for their aggress determination to recover downed aircrew or other injured or isolated personnel. While quiet capable at the local base recovery mission, the HH-43 also proved to be an adequate Personnel Recovery platform as demonstrated on March 2, 1965. During the initial strikes, supporting Operation Rolling Thunder, two F-100s and an A-1 were shot-down in North Vietnam. An HH-43 formation, callsign Bandy 95 and 96 were called to recover them. The formation first picked up the South Vietnamese A-1 pilot from the Gulf of Tonkin and then move inland to recover the F-100s. The HH-43s were supported by a formation of four Navy A-1s that marked the survivor's location and assisted in suppressing some of anti-aircraft artillery. With enemy flak exploding overhead, Bandy flight found the location of both of the downed F-100s, while one pilot had already been captured, the other was safely hoisted onto Bandy 96 and the formation returned home. It was a historic day as Rolling Thunder began

and the USAF scored its first successful rescue in North Vietnam and in North Vietnamese waters.[24] Missions like this laid the ground work for additional tactics to improve rescue and recovery throughout Southeast Asia.

While capable, the Air Force noted the HH-43 limitations and, in 1965, increased the capability of its combat rescue mission by introducing the H-3 to the Southeast Asia theater. The first Sikorsky CH-3C was delivered to Nakhon Phanom Royal Thai Air Force base on July 6, 1965. The CH-3 filled the gap, to increase the capability of the rescue forces until the rescue specific model could be fielded. This cargo helicopter was only a temporary fix as aircrew were being trained on the new rescue model HH-3E "Jolly Green Giant" at Stead Air Force Base in Nevada. By December 1965 a total of six HH-3Es and one CH-3C were operating from Udorn.[25] The HH-3 represented a drastic increase in capability; its speed, capacity and endurance, due to air refueling capability exceeded the HH-43.[26] Prior to entering the theater, the HH-3 crews were specifically trained for rescue in Southeast Asia at Stead Air Force Base, under the code name "Limelight 36."[27] This training allowed the crews to become better prepared by training them to the specific mission and flying characteristics that they faced. These helicopters, along with the HH-43Fs, were providing the rescue support that was required for the personnel in Southeast Asia.

While the HH-3B represented a vast improvement in rescue capability, the Air Force continued to pursue a better platform. In May 1966, Military Airlift Command requested a new rescue vehicle. The Sikorsky HH-53B Super Jolly Green Giant was purchased, crews were trained and it arrived in theater on September 14, 1967.[28] The HH-53 crewmembers received special training at Eglin AFB. This course was eight weeks dedicated to prepare the crew for operations specifically in Indochina.[29] The arrival of this aircraft marked a significant advance in

capability and it provided an amazing lift capability over the HH-3. "One lifted an A-lE weighing 12,000 lbs., from a position 56 miles southeast of NKP, and carried it back there. Another one lifted and carried a Huey chopper weighing 5,700 lbs., fifteen miles to Lima Site 36."[30] The newly arrived helicopter was the fastest and best armed rotary-wing asset in Indochina and "it was able to proceed to practically any combat area to recover downed airmen."[31] It was three years after the initial deployment of the ARS and the Air Force finally had an advance helicopter that could effectively perform personnel recovery.

Helicopters were not the only asset used for combat rescue; fixed-wing rescue platforms were introduced to Indochina and gradually improved to effectively support personnel recovery. The Air Force still needed a way to control the rescue missions from the air and to recover those who had crashed or bailed out over the Gulf of Tonkin. To solve this rescue problem, PACAF ordered the 33rd ARS to send two Grumman HU-16s Albatross to Korat, Thailand to assist with airborne rescue and recovery control for Thailand and Laos. Additionally, in July the 31st ARS sent two HU-16 aircraft to Da Nang, South Vietnam to assist in ocean rescues.[32] The HU-16 was a World War II amphibious aircraft that had been modified to provide rescue capability to men who bailed-out over water. The HU-16, callsign "Crown" controlled the missions over the Gulf of Tonkin or the mainland, while maintaining the ability to land on water and performed the recovery itself. The HU-16 received the initial notification of an aircraft in danger or a ground team needing support, then relay to the SARCC and the closest rescue unit. Coordination continued to get strike aircraft overhead to protect the survivor. Since rescue operations had been downsized to peacetime just prior to this conflict, it created the necessity to develop the tactics for rescue command and control, during the conflict. This aircraft would be the first of

several in an effort to develop an effective command and control capability for rescue in Southeast Asia.

While many envision a command and control aircraft as one which orbits safely away from danger, the HU-16 crews were known to place themselves into harm's way to perform a rescue. On 1 July 1966, a Mayday call was heard from a damaged US Air Force F-4C. The pilots had ejected from their aircraft off the coast of Vietnam; one landed approximately a mile and a half off the coast, the other a half a mile. As the HU-16 arrived to perform the rescue, it noticed that enemy boats were moving towards the survivors and that small arms and mortars could be seen from the shoreline. Two A-6's, four A-4's and two A-1's provided suppressive fire as the HU-16 landed to pick up the pilot closest to shore. The pararescue jumper (PJ) dove into the water and retrieved the pilot and the HU-16 then taxied one mile to the other F-4 pilot. With both pilots onboard, the aircraft took off and returned to Da Nang for a successful mission. Overhead aircraft reported that mortar fire had been tracking the wake of the aircraft the entire time it was in the water.[33]

The HU-16s provided the initial rescue and command and control; they were not optimally equipped for this mission. The Douglas HC-54C was brought to Indochina, in 1966, to replace the HU-16s as a rescue command and control asset. While the HC-54Cs could fly higher and longer they still did not have the proper equipment to act as an airborne command post. In December 1965, the first Lockheed HC-130Hs arrived in theater to replace the other fixed wing in the command and control role. The HC-54 departed Indochina in April 1966. The HC-130 had the ability to support the SAR mission with radio direction finding equipment and the appropriate amount of radios and crewmembers to control a mission. An additional officer was assigned to fly in the HC-130 to act independently of the pilots and to control and coordinate for

the rescue mission. The HC-130 provided additional support to the SAR mission by providing aerial refueling the HH-3's and later the HH-53s to give the helicopters additional range.[34]

The aircraft and aircrew was not the only portion of the rescue service not prepared for combat operation. The pararescuemen, who were the combat medics that flew and deployed from the rescue aircraft, had lost much of their capabilities since the Korean War. A rescue report stated that "At best, the initial SEA assigned pararescuemen were knowledgeable in advanced first aid…they did not have the training to cope with mass casualty situation…and were weak in principles of triage."[35] The ARS actions after Korea allowed the focus to shift from combat rescue and medicine to a combination of civilian or humanitarian service and support for the growing space program. The missions that the PJs originally faced in Southeast Asia were anything from hoisting out wounded Airmen, to mass casualties operations; the men did not have the skills for these complex missions. In 1966, in response to the deficiencies seen in combat, the ARS developed a four phase program to train the PJs. This program did not become fully operational and validated until January 1968.[36] The PJs were capable at the beginning of the conflict; they did not have the training needed to be fully effective at all the missions that they were required to perform. MATs and the ARS needed to have the foresight to maintain high combat medicine skills for the PJs. This lack of training may have cost Americans lives and it showed the high level of training that needed to be maintained by Air Force rescue.

The quick advancement of rescue aircraft and PJ procedures, during the first five years of Southeast Asia, showed that there had been a need for better equipment prior to the conflict. The Air Force entered the conflict with the HH-43 and HU-16. Neither were truly a combat aircraft; both were ill-equipped to handle the missions that they were asked to perform. The rescue helicopters advanced through this time period, from the HH-43 to the HH-3 and finally the HH-

53. The fixed-wing assets briefly employed the HC-54 and finally settled on the HC-130. All of the aircraft procured for rescue during Indochina had been designed for other roles and they were developed over the course of the war. By the time the most advanced assets were deployed, the US had been participating in the conflict for seven years. By not thinking about combat rescue during peacetime, the rescue capability was limited in wartime. Had MATs invested in the equipment and training of rescue during peacetime, many American lives would have been saved. The rescue service was not prepared for combat operation, either in quality or numbers of assets, when they entered the war and this lesson must not be repeated

Another issue facing the rescue service was command structure for the deployed forces. The peacetime mission of the ARS allowed them to be report directly to the base commander for mission assignments. The lack of a centralized rescue control became apparent during the early years of the conflict. As rescue units initially entered they were placed under the control of the Seventh Air Force (7AF). The Commander-in-Chief, Pacific Command (CINCPAC) had control of all assets and airmen assigned to Southeast Asia. He delegated the responsibility for search and rescue to the Commander, 7AF, for all of Southeast Asia. As more and more rescue aircraft and aircrew entered Indochina it became apparent that they needed to be properly organized to accomplish the mission. In January 1966, PACAF activated the 3rd Aerospace Rescue and Recovery Group (ARRG) at Tan Son Nhut, Vietnam. The commander of the ARRG served as the executive agent for operational control over all rescue and recovery missions. To ensure the wartime mission was understood, the ARS was renamed the Aerospace Rescue and Recovery Service by MATS and was once again focused on both a wartime and peacetime rescue. The 3rd ARRG both incorporated the JSARC and consolidated all rescue control functions and Air Force

assets under one command.[37] Now all the rescue squadrons received taskings and reported directly to the 3rd ARRG to ensure efficiency of command.

The peacetime rescue mission had allowed combat rescue tactics, learned in Korea, to be forgotten because MATS allowed it to shift its focus. While there should have been a continual development to meet new threats, this did not happen. Instead, tactics were developed during actual conflict, while literally under fire. From 1966 to 1969, the rescue helicopters and fixed-wing aircraft developed tactics and procedures to ensure that personnel involved in combat action were supported by rescue. There was basic preparation training at several bases to prepare the Airmen for combat. The HH-3 and HH-53 crews received an eight week theater orientation at Eglin AFB, Florida, while the HH-43 trained at Sheppard AFB, Texas.[38] The training focused on "day and night instrument training, transition, land and water hovering, hoist and sling operation, air refueling, high altitude work, and gunnery missions," but the course instructors believed that there was no way to completely training a person prior to arriving in theater.[39] Most rescue squadrons in Southeast Asia developed their own training, in theater, to prepare the Airmen for combat. While theater preparation training is normally required prior to combat, the amount that the rescue service required was excessive. This training highlighted the lack of combat preparation that the service had. By taking the combat mission from rescue it left them ill-prepared to face the challenges of combat. Had rescue trained to combat standards, prior to entry into Southeast Asia, the impact on lives saved and overall capabilities would have been immediate.

Since rescue and recovery had to develop its combat rescue tactics during the conflict, it took approximately three years before an effective mix of aircraft and tactics was established, providing a complete rescue posture to the theater. A typical alert posture had two HH-3Es

Jolly Greens on alert at Da Nang, South Vietnam and two other HH-3s at forward Lima sites, south of the demilitarized zone. Another two HH-3s were kept on ground alert at Nakhon Phanom, Thailand or in airborne alert orbits for rescue missions in Laos. Two HH-53Es sat alert at Nakhon Phanom, while another two flew orbit alert over northern Laos or ground alert at Lima sites. The HH-43's filled in the gaps in the rescue coverage by sitting single or two ship alert at 14 bases scattered throughout South Vietnam and Thailand. The HC-130Ps had morning and afternoon airborne alert orbits over Laos and over the Gulf of Tokin, while two others set alert at Udorn, Thailand and Tuy Hoa, South Vietnam. In February 1966, the 602nd Air Commando Squadron moved to Udorn, under orders from the PACAF commander, and was assigned the primary mission of providing rescue escort (RESCORT) with A-1s, callsign "Sandy" or "Spad." The A-1's had two orbits in Laos and have six aircraft on ground alert at Nakhom Phanom. [40] This layout allowed the rescue and recovery forces to be adequately placed to cover the entire theater and to respond to any type of Personnel Recovery mission that arose. This layout allowed the 3rd ARRG to provide personnel recovery support to "1.1 million square miles, extending from the Mekong River Delta to the Chinese border and from the South China Sea to the Burmese frontier."[41]

If aircrew were forced out of their aircraft or ground teams needed medical evacuation they contacted the HC-130, HU-16 or HC-54 in its orbit. The airborne rescue mission coordinator then contact the local rescue control center to alert it to the mission. The local rescue control center controlled the mission while the JSARC monitored the progress and kept 7AF informed of the mission. When necessary, search and rescue missions became the highest priority of all missions in Southeast Asia; additional strike assets were diverted to help support the operation. Additional strike aircraft were added to mission to support the A-1s and Jollys;

their role was titled rescue combat air patrol (RESCAP). The task of RESCAP was to engage enemy forces who were potential threats to the survivors or the rescue helicopters.[42] The combination of the rescue rotary-wing aircraft, A-1Es, HC-130 and additional strike aircraft was known as a search and rescue task force (SARTF). If the mission forced the SARTF to go into North Vietnam, then JSARCC and/or 7AF commander approval was needed. If not, the local rescue center could authorize the execution. Once the mission was approved, the Sandy's would proceed to the bailout site, and with other strike aircraft supporting, find the survivor and sanitize the area. Once the area was secure, the helicopter, with two additional Sandy's escorting it, proceeded into the survivor's area and performed the pickup. With the survivor safely onboard, the entire SARTF then egressed the area, with the PJs providing treatment while proceeding to the nearest air base.[43]

The advancement of these tactics allowed for rescue missions that were deep into heavily defended enemy territory. These missions would not have been successful in the opening days of the conflict. An example of a deep rescue occurred on May 10, 1966, when an F-105 was shot down in the vicinity of the Red River in North Vietnam. With four A-1s supporting, Jolly Green 56 and 51, two HH-3Cs, left their Lima Site alert position and proceeded north towards the Red River for the rescue. The Udorn rescue control center approved the mission. The survivor was injured and at the bottom of a canyon, approximately 35-40 miles from the Chinese border. Enroute to the bailout site, the SARTF was forced to avoid several known surface to air missile sites, but made it to the survivor's location undetected. The HH-3C was forced to hover into the canyon sideways and lower all 240 feet of hoist cable to retrieve the pilot. The survivor's location was marked by the large fire he had started by misuse of his signal flare. The entire time that the Jolly hovered, small arms fire was heard, but not seen around the helicopter. With

the pilot safely onboard and under the care of the PJ, the Jolly Greens departed with the A-1Es still escorting. Enroute to home the formation was intercepted by a flight of MIGs. As the SARTF broke up in defense of the enemy aircraft, the MIGs chased the HH-3s, hoping to take down the easier target. In turn, the Jolly Greens elected to defend into the clouds to avoid detection and to call in a formation of F-4s to engage the threat.[44] The MIGs were engaged by the F-4s, broke contact and the Jolly Greens continued to Udorn, arriving there safely. It was these types of tactics, those involving numerous aircraft that evolved over the early period of the counterinsurgency and allowed the rescue force its success.

In Southeast Asia, the ARS was ill-prepared for the conflict, whether in training or in tactics. It took almost five years of combat operations before the rescue tactics were refined. Colonel Edward Krafka, the 38th ARRS commander, confirmed this when he stated that during the beginning of the conflict each "operation such as that experienced was unprecedented, the initial efforts were played by ear so to speak."[45] While the actions in Vietnam were focused on counterinsurgency operations, there was a conventional threat anytime American forces ventured into North Vietnam. None of the aircraft deployed in this conflict were effectively equipped to defeat radar guided surface-to-air missiles or the small arms and anti-aircraft artillery they faced. Prior to entering this conflict the personnel recovery forces failed to study the latest threats and instead focused on the peacetime mission. The ARRS had to relearn many of the lessons that were learned in Korea as it developed new lessons to counter the increased threat. While the rescue service was eventually capable of supporting the counterinsurgency, initially it did not have the knowledge or tactics to do so. If the forces had been kept combat ready then they would have had the tactics to be successful when they initially entered.

The original intention was to focus solely on rescuing aircrew; that was the initial reason for deploying the aircraft to Indochina. It quickly became apparent that these aircraft were versatile regarding what missions they could perform. The HH-43s were the first to be used in other lifesaving missions. They deployed to most of the airbases, and with the HH-3 and HH-53 performing long range rescue missions, were free to be used in other roles. Using the callsign "Pedro" the helicopter took on the role of local base recue or aircrew recovery. Local base recovery kept the Pedros on three minute alert to pick up any downed aircrew that bailout within the vicinity of their air base they were returning to.

While not a primary mission for US Air Force rescue, battlefield medical evacuation became a central mission for the Pedros. Most Army and Marine helicopters did not have hoists onboard, so the HH-43s were called upon to pull the troops from the dense Vietnam jungles.[46] Many of these medical evacuations were performed under enemy hostile fire, so often the Pedros took Army helicopter gunships to provide needed fire support.[47] The Pedros also performed numerous other humanitarian missions, such as the medical evacuation of local civilians or the transportation of American doctors to assist in civic action programs. The HH-43 missions were approved through the local base commander, with some coordination from the JSARCC, allowing for great flexibility and support to the overall personnel recovery mission.[48]

The capability of Air Force rescue allowed them to seamlessly integrate with the other services to provide needed battlefield support. On April 11, 1966, the Pedros and their PJs showed their effectiveness in casualty evacuation. Thirty miles southeast of Bien Hoa, South Vietnam, a U.S. Army unit had sustained multiple casualties and required evacuation. Three Pedros were called to rescue the personnel. The Pedros arrived at the scene, lowered their PJs and began shuttling American casualties to safety. Viet Cong activity was intense in the area, so

two Huey gunships, three F-100s, two O-1Fs and artillery were called to provide danger-close fire for the helicopters and ground personnel. One HH-43 was severely damaged by Viet Cong fire and was forced to limp to a safe area leaving its PJ, Airman First Class William Pitsenbarger, on the ground, to continue to aid the wounded and fight the enemy. Enemy fire increased in the afternoon and the helicopters were unable to return until the following day. During the night, Pitsenbarger exposed himself multiple times to enemy fire to care for the wounded as he helped defend the unit from enemy attacks. At some point during the firefight he was hit four times by enemy fire and finally, he was mortally wounded. The Pedros were credited with nine saves over the course of the day; Pitsenbarger was posthumously awarded the Air Force Cross, later upgraded to the Medal of Honor, for his actions on the ground.[49] Assisting in casualty evacuations, such as these, showed the versatility in operations that welled trained rescue helicopters and PJs can support in irregular warfare.

The more advanced HH-3 and HH-53 also did more than just provide a rescue capability for downed aircrew. The helicopters were there to provide medical or rescue aid for airmen, coalition soldiers, and Vietnamese civilians alike in the counterinsurgency conflict. The North Vietnamese Tet Offensive of 1968 overwhelmed the Army and Marine Corps capability to remove casualties from the battlefield. The Air Force's HH-3E's and HH-43 B/F's were pressed into action during this period, ferrying troops from the battlefield to hospital ships in the Da Nang Harbor. From 30 January to 29 February, the HH-3's flew 122 missions and evacuated 975 casualties, while the HH-43 flew 1014 sorties saving 749 soldiers and Marines.[50] The HH-53 was even used for humanitarian support as exampled in the spring of 1968 when it assisted a pregnant Thai woman by taking her from her village to a nearby hospital.[51] The 3rd ARRG's missions from January to March 1967 show how the personnel recovery assets could support all

within the theater. The Rescue Group launched on a total of 148 missions during this three month period. Of those, 26 were medical evacuations, resulting in 116 American, coalition and local population lives saved.[52]

Rescue missions are flexible in nature and so was the way the assets were deployed. While not deployed specifically to assist soldiers and Marines, the capabilities that made the rescue aircraft successful in rescuing aircrew, allowed them to easily transition to other missions. The counterinsurgency was hampered by limits on men and equipment. Those deployed needed to be capable of multiple missions. The Air Force personnel recovery assets were flexible enough to assist in the additional roles of casualty evacuation and humanitarian aid.

The summer of 1969 saw the peak of USAF rescue helicopters in Southeast Asia with four squadrons operating under the 3rd ARRG. The 37th ARRS controlled all 20 HH-3Es within the theater. The 31 HH-43s fell under 38th ARRS which had 14 two or three ship detachments in Thailand and South Vietnam. The idea was that with multiple locations, the Pedros limited coverage overlapped and all of South Vietnam was under their coverage.[53] The 11 HC-130P remained the only fixed-wing rescue aircraft assigned to the 39th ARRS. The 40th ARRS, a new squadron was made up nine HH-53s and one detachment of HH-3s.[54]

The early years of the conflict, from 1964 to 1969, established that dedicated personnel recovery assets were required when fighting a counterinsurgency. However, when the ARS entered the conflict in Indochina, their impact on American personnel was not instantaneous. Over the course of two years, the Air Force built a force that was needed to adequately support the conflict. Had they been prepared and deployed as combat actions began, their impact would have been evident from the beginning; moreover, it is likely that additional lives would have been saved.

The USAF rescue forces provided amazing support to operations in Southeast Asia. In the five years of operation, from December 1964 until end of 1969, the airmen were responsible for 2,830 lives. Of these, 1,812 were considered combat saves, where the "possibility of death or enemy capture was extremely high."[55] The USAF forces showed that if a person needed to be saved, Air Force rescue attempted to do so. They "put forth equal effort without regard to service or nationality."[56] In this period, it is interesting to note, that the USAF Personnel Recovery effort saved more US Army soldiers than downed aviators. Additionally, 160 local civilians and 315 foreign military members were also saved, during this period.[57]

Drawdown to Ceasefire: 1970-1973

Beginning in 1970, the US policy to 'Vietnamize' the war effort began to affect the rescue forces deployed in theater. Over the course of the next three years, the units of the 3rd ARRG was relocated, realigned, or deactivated.[58] At the same time that the rescue force size was decreasing, the Air Force was investing heavily to increase the capabilities of the HH-53's, which remained in country. The rescue tactics and techniques that were successful in early operations continued to be refined. All services involved in Southeast Asia began redeploying their forces, so Air Force rescue was required to expand its mission sets to support counterinsurgency operations. As rescue assets were sent home, the 3rd ARRG was forced to refocus on its mission, remain flexible in its approach to new missions and do all of this with decreased manpower and airframes.

Not only were the rescue aircraft being redeployed from the theater, but rescue was also losing some of its major support aircraft. The A-1 was phased out of combat operations in October 1972. From 1970 until 1973 the SARTFs saw less and less A-1 support and be forced to develop newer tactics to fit other aircraft. It was replaced by A-7D which also took over the

callsign of Sandy. The OV-10 became an important asset in the SARTF during this period.[59] The OV-10 provided forward air control for rescue mission; if needed they filled in to provide RESCORT for the Jolly Greens. The two aircraft did not have the same capabilities of the A-1, but were able to work together to bring similar abilities to the SARTF. As asset availability became increasingly limited, the rescue service adapted its tactics to meet the changes.

Tactics that the SAR forces used were finally being written down and for future operations. The *7AF Manual 64-1, Search and Rescue-Southeast Asia*, was developed; it outlined the tactics and techniques that were to be used by each member of the SARTF. The manual was a step in the right direction, but as one 3rd ARRG commander stated "Our development of present SAR capability has been a history of relearning lessons already learned by someone else, but who unfortunately could not or did not document it for others to profit by."[60] The 3rd ARRG looked to rectify this problem by developing written tactics that could be used in other similar conflicts. 3rd ARRG Deputy Commander, Colonel Warner Britton noted that during this period, "every effort must be extended to insure propagation and perpetuation of the concept, philosophies and capabilities of combat SAR which underwent the embryotic stages in Korea were reborn and nurtured to maturity in SEA."[61] Rescue had solidified its place in counterinsurgency operations by this time; it was now a given that rescue and recovery tactics and strategies were mandated in the training for future operations. To ensure that the lessons were learned were not forgotten, the rescue service used its power and influence to ensure their missions were documented and taught at US training schools.

While still supporting rescue and recovery operations, the 3rd ARRG was asked to take on additional missions. One of the more unique missions was an attempt to rescue American prisoners-of-war. This was the ultimate step in being able to support the overall personnel

recovery mission. On November 20, 1970, five HH-53s and one HH-3 raided a POW compound at Son Tay, 28 miles northwest of Hanoi.[62] The raid was result of intelligence reports, planning and training that had begun as far back as August 8, 1970. The purpose of the mission was to rescue up to 100 prisoners of war from the prison; it was supported by five A-1Es, five F-105s, ten F-4s and two C-130Es.[63] The overall plan was to crash-land the HH-3 in the center of the prison compound and unload a team of raiders to release the prisoners. The HH-53s infiltrated teams outside the compound to secure it, while the fighters and C-130s dropped napalm to ensure no one else approached the prison. The plan was executed, but unbeknownst to the recovery team, the prisoners had been moved prior to the raid.[64] While the ARRS lost one HH-3 and no POWs were found, it demonstrated the flexibility of personnel recovery forces. Additionally, as the task force returned from Son Tay, two of the HH-53 was diverted to pick up two F-105 aircrew who had been shot down. [65] This mission also showed the flexibility of personnel recovery. By this point in the conflict, if needed, Air Force rescue and recovery had the assets, training and the experience to assist anything that involved saving lives. Son Tay demonstrated rescue's capability to plan successful operations and to execute, if properly supported, in the full spectrum of the personnel recovery.

This period was also marked by the increased use of advanced weaponry by the North Vietnamese. American and South Vietnamese pilots bailed out in areas that were not permissive for immediate rescue. Oyster 01, an F-4, was one such Air Force crew that experienced this scenario. After shooting down their third MIG, Oyster 01 was engaged by an additional MIG and subsequently shot down. The pilot was never found, but the weapons system operator managed to evade capture for 23 days in heavily defended North Vietnamese territory. A SARTF made up of two HH-53s, a HC-130, A-1s, F-4s and F-105s were able rescue him on 2

June, 1972. The rescue effort faced extreme enemy fire enroute to Oyster and during the pickup from buildings, trucks and a train.[66] This type of mission showed that there were some limitations to what the rescue forces could do. But after years of training and developing sound tactics, Air Force rescue and recovery was now more capable of dealing with advanced threats than it was at the beginning of the conflict.

The development of tactics assisted the SARTF in transitioning new support aircraft in to assist the helicopters and HC-130s. A-7 Sandys were assigned to provide RESCORT to two HH-53 Jolly Greens to rescue the pilot and electronic warfare officer of an F-105G that was shot down on 16 November 1972. The area that the crew ejected was heavily defended by anti-aircraft artillery and radar surface-to-air sites. An impressive RESCAP package was formed; it was composed of F-105s, F-4s, EB-66 supporting along with the HC-130 and KC-135 tanker. The rescue attempt was delayed until 18 November, due to weather and enemy threats. After several delays enroute to the survivors the HH-53 proceeded inbound. Due to a low cloud deck, the helicopters and A-7s were forced to fly through the clouds into the valley containing the survivors using only their radar altimeters. The Sandys were able to locate the survivors and bring the Jolly Greens into the area. There was intense anti-aircraft artillery in the valley, so additional A-7s were brought to lay a smoke screen that enabled the helicopters to ingress into area and to mask the survivor's location. While hovering to pick-up the pilot and weapons officer, the HH-53 was forced to engage enemy small arms with its mini-guns. The pickup was successful and the Jolly Greens returned to Nakhon Phanom with two survivors.[67]

Rescue forces continued to support the US Army and coalition forces during this period. As US forces continued to drawdown in 1972, North Vietnamese began major offensive actions in the spring. In late April, four North Vietnamese divisions surrounded Quang Tri City; its

defenders were South Vietnamese troops and American advisors. The friendly forces had suffered casualties and all 132 members needed evacuation. Four HH-53s launched from Da Nang, on May 1, to evacuate the fortress. A formation of A-1s cleared a route into the city and three of the rescue helicopters raced in while the fourth waited in reserve. The area was hostile with SA-2s and enemy patrols in the area. The first Jolly loaded 37 men, the second 45 and the third loaded 50 men, then safely egressed from the city. As they departed the reserve Jolly heard a radio call that there were more men at Quang Tri needing evacuation. As it landed, North Vietnamese troops rushed towards the helicopter, the HH-53's mini-guns opened up and the Jolly Greens flew out of the trap and safely recovered to its home base.[68]

Personnel recovery missions decreased as operations in South Vietnam were turned over to the South Vietnamese Army. There were surges in U.S. Air support to the region for events like the North Vietnamese 1972 Spring Offensive and bombing campaign of Linebacker II, in December 1972. Even with these increases in operations, during the drawdown, the amount of rescues decreased. By the end of 1972, with increased peace talks, almost all the Air Force's rescue units were removed from Vietnam. All rescue forces were relocated to Thailand to continue to provide a personnel recovery umbrella for the entire region.[69]

When the final ceasefire agreement was announced in January 1973, rescue forces stood at eleven HH-53s and fourteen HH-43s, all stationed at Nakhon Phanom.[70] At the time of the cease-fire agreement the Air Forces had been responsible for a total of 4,184 saves since it had arrived in country in 1964. 2,898 of those had been combat saves, with the rest being non-combat saves.[71] The Air Force had provided a crucial service in supporting the Americans, coalition members, and local population, throughout the irregular warfare operations in Indochina. Though operations in Vietnam were complete, American attacks were still being

made in Laos and Cambodia. Significantly, PACAF and Air Force commanders finally understood that if aircraft or American personnel were operating in a contested area, personnel recovery was needed.

Ceasefire to Final Withdrawal: 1973-1976

Rescue forces were still required to remain in the theater even after the ceasefire agreement in January 1973. Though there was no action in Vietnam, reconnaissance and bombing missions continued in Laos and Cambodia.[72] USAF Rescue had proven itself in the previous years and if American assets were flying the military wanted men and aircraft willing and able to bring them home. Changes again occurred to make the search and rescue assets meet the mission. The ARRG continued to provide the theater with dedicated personnel recovery support as well as the ability to perform long-range medical evacuation missions. This period was marked with increased training for the rescue forces in theater. Additionally, USAF search and rescue once again were asked to expand their capabilities to provide non-combatant evacuation and hostage recovery for the theater. These types of missions easily fell under the abilities and spectrum of what the personnel recovery forces could complete. As one report stated, "the primary mission of the 3rd Aerospace Rescue and Recovery Group is to save lives."[73] The service continued to support this idea until its final withdrawal from the theater.

Training became extremely important during this period. Even as they transitioned to more peacetime operations, the ARRG understood the need to have a combat ready personnel recovery force. A snapshot of the missions flown between 1 January 1975 and 30 March, illustrate this. During this time there was only one SAR mission to recover aircrew; there were 15 medical evacuation missions and 17 SARTF training missions.[74] The command saw the validity of a ready combat personnel recovery force and aimed to keep them at this status.

This attitude defines a shift in thinking from what was experienced prior to the war. The MATS which became the Military Airlift Command (MAC), was not the proper command to control rescue assets. It made sense that the command which had global reach should control global rescue but the command was not oriented towards combat. MATS removed the wartime requirements for the ARS and allowed its equipment and training to decline to a degree where it could not initially deploy adequate combat rescue support to the theater. Rescue is a specialized mission that requires a command structure that enhances its capability. As one ARRG Commander stated, rescue needed the ability to become "a task force that goes wherever the action is and have the capability for rapid expansion to suit that action. In peacetime, the group would develop new equipment and techniques and deploy on exercises with tactical forces. In wartime it would be a nucleus which could rapidly deploy and place in the world."[75] For rescue to truly be effective, it must be supported and directed to arrive into conflicts early, so that American lives are protected from the beginning. The amount of different mission types that the 3rd ARRG had performed during the counterinsurgency showed the specialized nature of personnel recovery. MAC was not the correct command to nurture this attitude. The ARRS needed a parent command that allowed its focus to remain on combat, develop its equipment and get it to combat early enough to effectively support actions.

Even as the Americans turned over actions to the South Vietnamese and Cambodian governments, there was still a need for personnel recovery actions within Indochina. Thousands of American civilians remained in South Vietnam and Cambodia; as communist's military actions increased, these personnel needed evacuation. On March 12, 1975, a single HH-53 inserted a combat control team into a soccer field at Phnom Penh, Cambodia to coordinate the evacuation of the US embassy, as part of Operation Eagle Pull. There were a little less than

1,000 potential evacuees in Phnom Penh.[76] This rescue helicopter joined two others providing airborne rescue alert, as Marine CH-54s and CH-46s evacuated the embassy. Three additional HH-53s recovered the Marine security team and Air Force combat controllers.[77] A total of 287 evacuees, including the American Ambassador were rescued from Cambodia and taken to Thailand.[78]

The evacuation of Cambodia was barely complete when the 3rd ARRG was ordered to assist in planning and executing the evacuation of Saigon. On April 29, 1975, two HH-53s joined along with a single Marine CH-53 took part of Operation Frequent Wind for the evacuation of Saigon. The helicopters were to transport the evacuees from Saigon to Navy Aircraft Carriers in the South China Sea. On 29 April 1975, the evacuation began. An HC-130 orbited southeast of Ubon to act as airborne mission commander for the event. Two HH-53s made the thirty minute trip, from the aircraft carriers to Saigon, while avoiding heavy thunderstorms and the threat of enemy ground fire. The Air Force helicopters made two trips that day, from the USS Midway to the embassy in Saigon.[79] During one trip, a Jolly Green was targeted by an enemy surface to air missile and was forced to perform evasive maneuvers. Each load was full of Americans and Vietnamese resulting in 362 evacuees being saved by Air Force rescue. As the evacuation extended into the night, there was fear of losing an aircraft so the HH-53 were removed from the evacuation and placed on alert to recover any downed aircraft. The HH-43s were also involved in the evacuation, flying intercepts for defecting South Vietnamese aircraft.[80] These evacuations again showed the extreme flexibility and capability that a dedicated personnel recovery force can provide to operations.

The 3rd ARRG was tasked to expand its capabilities once more before exiting Southeast Asia. On May 12, 1975, an American container ship, the SS Mayaguez, was captured by

Cambodian Navy and its crew held hostage near Koh Tang Island. Six Air Force HH-53Cs, along with five Marine CH-53Cs, assaulted the ship, in an attempt to recapture it and release the crew. Two HC-130 Kings provided airborne command for the mission. Three of the Jolly Greens offloaded its reaction force on the USS Holt, a Navy destroyer which proceeded to the Mayaguez. The other three Jolly Greens landed on the island and inserted their teams. During the insertion on the island, two of the Marine helicopters were shot down; one was so badly damaged that it was forced to ditch a half a mile offshore. The Jolly Greens were able to successfully offload all their recovery teams on the island with only one helicopter being damaged and forced to withdraw from the mission. One of the Jolly Greens that inserted on the USS Holt was tasked to rescue the crew of the downed Marine helicopters. Due to intense ground fire the rescue attempt was not successful. The three Jolly Greens returned to the island to recover the aircrew and Marines under the cover of darkness. Still under intense fire, the helicopters were able to extract 146 Marines and five Marine helicopter crewmembers and the Mayaguez crew was liberated.[81]

The Mayaguez mission proved to be the last effort of Air Force rescue in Southeast Asia, on January 31, 1976 the 3d ARRG deactivated, ending a generation of rescue and recovery. The 3rd ARRG possessed four HC-130Ps, nine HH-53C and two UH-1Ns at the final pullout from Southeast Asia. The rescue crews achieved amazing results during the conflict in Southeast Asia. They had amassed a total of 4,082 saves during the course of the conflict, since 1964.[82] While the rescue service centered on the recovery of aircrew, it also provided supported all missions within personnel recovery mission. The ARRS did not come through the conflict unscathed. A total of 33 dedicated rescue aircraft were lost during in this conflict (27 were due to enemy ground fire and one was shot down by a MIG).[83] The crashes resulted in 42 Airmen

killed in action, 11 missing and three captured. The accomplishments that Air Force rescue achieved in this conflict were remarkable. The service modernized tactics, equipment and training while fighting in an irregular conflict. Air Force rescue learned many important lessons through this conflict. These were lessons forged through the blood and efforts of extraordinary men and should not be forgotten in future operations.

Lessons Learned in Southeast Asia

The American involvement in the counterinsurgencies in Indochina illustrated several important lessons for Air Force personnel recovery in regards to irregular warfare. The loss of lives proved why personnel recovery was needed in Southeast Asia, as well as future conflicts. It highlighted the need for this mission and why a dedicated force must be ready to respond to any type of contingency operation. While irregular warfare is typically covert, the benefits that rescue brings to these operations cannot be overlooked. For rescue, the conflict revealed that having a dedicated combat rescue force, properly equipped and trained for the newest threats and environments, is critical to protect and support its Airmen.

The conflict in Southeast Asia showed why personnel recovery is a required mission within irregular warfare. If assets are not assigned to this mission and it is not planned for, it can have serious consequences. Morally the Air Force was compelled to attempt to preserve the sanctity of life of its members who are sent into harm's way. Rescue missions in Southeast Asia impacted operational units by returning valuable and experienced aircrew and soldiers to their units, allowing the mission to continue. Personnel recovery in Southeast Asia was there manly as a support role for the aviators, soldiers and Marines that needed to be saved. Air Force rescue allowed the recovery of a multitude of coalition aircrew and soldiers who were previously unreachable in the dense Asian forest canopies. Pedro's and Jolly Greens pulled Canadian,

Australian and South Vietnamese soldiers from danger and carried them to medical care. The presence of a dedicated rescue force increased morale for these soldiers, allowing them to fight with increased effectiveness and confidence; they knew that rescue was out there, ready to assist them. While the American casualties in Vietnam were high, they could have been a lot worse if the rescue forces had not been as successful as they had been. The rescue service kept hundreds of aviators and military personnel from being captured to be used as propaganda by the North Vietnamese and the Viet Cong. In a small way, Air Force rescue not only directly supported the wounded or isolated military personnel, but they also impacted the American support for the war by decreasing the amount of Americans that potentially could have been lost.

The percentages of saves made by Air Force rescue assets, even when faced by a skilled adversary, was amazing. From July 1966 until November 1967, there were a total of 470 Airmen downed by enemy fire. Of these, 89 percent, or 419, survived until landing. There were 197 of these Airmen for whom no SAR effort was made because either it was understood that they had been captured or the environment was not permissible for SAR assets to operate. Of the missions that Air Force SAR assets launched, they were 78 percent successful. The unsuccessful missions were attributed to the survivor being captured or killed after forces launching or nightfall, where there was limited capability.[84] Morale increased for aircrew and soldiers; knowing that chances of survival and recovery were this high allowed them concentrate even harder on their assigned tasks.

On a lesser extent the ARRS helped to improve the morale of the local South Vietnamese and Thai populations. The ARRG performed humanitarian missions within the area to bring sick or injured locals quickly to medical attention. Additionally, Pedro aircraft were known to take American military doctors to local treat those who needed this type of support. Rescue provided

a service that the local government could not. The humanitarian aid made up for a possible grievance that the communist insurgents could have used to gain the support. By directly saving the lives of American military, and host-nation population, rescue demonstrated why it is essential for irregular warfare.

The Air Force learned many things from the experiences of the rescue service in Indochina. The losses that originally plagued the service did not go unnoticed. This highlighted the needed for a dedicated rescue service with the capability to rapidly deploy to save American lives. PACAF and MACV did not understand the impact of exposing Airmen, soldiers and Marines to insurgent threats without dedicated rescue forces to support operations. The effect of American casualties and prisoners of war has an amazing impact on public opinion. In irregular warfare, if Air Force rescue is deployed to cover initial operations the effects of these losses can be minimized.

The conflict also demonstrated the level of training and equipment that is required to maintain a combat ready rescue force. Air Force rescue must be trained and equipped to support a wide variety of combat and contingency operations. While equipment, training and tactics evolved over the course of the conflict, it took almost four years for rescue to have the complete structure in place to adequately cover the entire theater. The upgrades that occurred during the conflict should have happened before the US Air Force even began operations. The equipment and training used by rescue should have modernized to meet the newest threats and to be able to perform in the most demanding environments, prior to the actual conflict. As the Air Force looks ahead to future conflicts it must ensure that rescue's training and equipment is continually upgraded to meet the next challenges. If the service fails to do this, like it did prior to this conflict, it will unnecessarily risk American lives.

Applying the Lessons Learned to Current and Future Operations

The lessons that were learned during the conflict in Southeast Asia should be a constant reminder of an important mission that must not be neglected. By comparing these lessons to the current attitudes and opinions towards Air Force rescue it is clear that some have been forgotten. Due to current conflicts and constricting budgets, the Air Force has decreased its capability to provide personnel recovery support to the warfighter. The ARS entered the conflict in Southeast Asia without the appropriate numbers to provide effective personnel recovery support. The current rescue force has seen similar reductions to equipment that will affect its ability to operate in the future. The current rotary-wing rescue platform inventory has shrunk from 112 Sikorsky HH-60Gs to 99; this is due to multiple years of conflict with no replacements or follow-on aircraft produced. These aircraft are currently flying with a less than a 60% mission availability rate.[85] The Service has failed on several attempts to acquire a new rotary-wing platform. While recent studies have shown that rescue requires 140 to 170 rotary-wing aircraft to adequately perform the rescue mission, the Air Force is still favoring a lower total number of aircraft.[86] In regards to rescue helicopters, the Air Force has even mentioned the possibility of "exploring Joint solutions to ensure sufficient PR capabilities in the coming years."[87] The current fixed-wing rescue platform, the Lockheed HC-130P, has faced similar problems. Prior to the acquisition of the HC-130J, the aircraft had a 51 percent availability rate and funding remains low for the follow-on of the 1960s era aircraft.[88] The HC-130 recapitalization studies showed that 78 of these aircraft were needed and the Air Force has only budgeted for 37 new aircraft.[89] The reduced rescue force is able to sustain its current operations, but as availability rates fall, its future capabilities to the same seem doubtful. It is a similar situation that ARS faced when it entered Southeast Asia. They did not have the assets that were specifically trained for search and

rescue, additionally only limited numbers were initially introduced. While current rescue trains to combat rescue, they will not have the numbers of rescue platforms needed to adequately support future irregular warfare or major combat operations. If the Air Force elects to create a joint solution for personnel recovery, the service will likely see the same results as in the early years of the conflict in Southeast Asia. There, rescue and recovery was done as a secondary mission by the Army and Marine Corps and it cost the lives of a multitude of Airmen. In regards to the equipment used by rescue, the Air Force only needs to look at the past to understand the importance of sustaining a modernized rescue force capable of operation in the most hostile and challenging environments.

While the effectiveness of the aircraft has decreased, the belief in the ideals of personnel recovery has not diminished in the opinion of the Air Force. Air Force rescue continually trains its aircrew and PJs to the standards need for successful operations in combat. In the most recent conflicts, Operation Enduring Freedom, Operation Iraqi Freedom and Operation Odyssey Dawn, rescue forces deployed initially to perform combat search and rescue. Training allowed the community to be flexible and adapt to a wide range of missions, which covered the full spectrum of missions within personnel recovery. Rotary and fixed-wing rescue assets were called to perform combat search and rescue, humanitarian aid, casualty evacuation, direct support to special operations and the recovery of unmanned intelligence gathering aircraft, in these recent conflicts. Just as in Southeast Asia, the rescue Airman has provided the needed personnel recovery support to the joint force commander when called upon. The importance of rescue was highlighted in 2009, when the Air Force Chief of Staff added personnel recovery as one the Air Force's core functions.[90] Airmen will continue to train to the standards need to perform combat

rescue, but the Air Force is not putting the proper emphasis or resources into the mission that can have such a dramatic effect on the battlefields of an irregular or major combat operation.

The current issues that faced rescue can be attributed to the command structure. Prior to entry in Southeast Asia, the rescue service under MATS, did not understand the need for a combat rescue service. Since 1975, rescue has shifted from mobility command to Air Force Special Operations Command (AFSOC), to Air Combat Command (ACC), back to Special Operations Command and is currently under ACC. Each command has had its own issues with understanding the rescue mission and need for combat rescue. Air Combat Command was initially criticized for not preparing the forces for Operation Desert Storm and Allied Force and late entry into Operation Enduring Freedom.[91] AFSOC was critiqued for not focusing rescue on the traditional combat force.[92] This lack of attention has directly resulted in the decrease in capability of the rescue forces. Because of its specialized nature, but relatively small footprint, rescue is often looked over in commands such as ACC. Once again, the command structure of rescue has allowed the valued and needed mission set to atrophy.

The lessons from the conflict in Southeast Asia remain valid for posturing Air Force rescue for its future. The Air Force must reinvest in the mission. The rescue force must be modernized and the manpower and equipment must be increased to sustain 140 rotary-wing and 78 fixed wing aircraft. This is the minimum required to support major combat in addition to the multitude of irregular operations that the military is involved in. The men and equipment must be prepared to meet the challenges of future conflicts. Training and equipment must be continually advanced to meet the challenges of future conflicts. Rescue leadership must push for more funds to do this and not accept capabilities that will only the equipment sustain through the current fight. The specialized nature of rescue requires a command structure that understands this.

Rescue should be moved back to Air Force Special Operations command to allow its specialized missions to expand. This command opens rescue to training and units that will allow it fully cover all spectrums of personnel recovery. Combat search and rescue, hostage recovery, casualty evacuation and humanitarian operations can easily be within the communities reach. The forward leaning focus of the special operations will allow rescue to get into the theater of conflict earlier to support irregular and traditional operations. Rescue's unique capabilities make the service essential for irregular warfare, if it is commanded, equipped and trained properly. The lessons of the past illustrate this and the Air Force must change its current posturing of rescue if it desires to maintain the capabilities required to save the lives of its Airmen.

Conclusion

American actions in Southeast Asia demonstrated the need for dedicated personnel recovery assets to support operations. Because the military failed to remember these lessons from the previous conflict in Korea, soldiers, Airmen and Marines died because there was no initial rescue support. In Southeast Asia, there were approximately 2,200 Air Force, Marine and Naval deaths as a result of combat operations; another 497 aviators became prisoners of war.[93] While Air Force rescue was able to save over four thousand personnel, this number could have been greater. If there had been a dedicated rescue presence, which was adequately prepared for combat, throughout the conflict it could have reduced the number of losses and prisoners of war. Because of these losses the Air Force realized the need for radical improvement in rescue operations and worked throughout the conflict to develop these capabilities. As the US prepares for future operations, it should recall the lessons from Southeast Asia. Indochina operations proved that Air Force personnel recovery assets could do more than just search and rescue. Furthermore, these rescue forces provided medical evacuation, humanitarian aid, hostage

recovery and non-combatant evacuation. These are not simple missions to perform and a "as-required" attitude should be avoided when executing personnel recovery missions. As the losses in Southeast Asia demonstrated, there is an absolute need for dedicated personnel recovery in irregular warfare. The Air Force must support this core function and the importance of it must not be overlooked or forgotten in times of peace.

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